

1 Payment will be made under:

Pay Item	Pay Unit
Fiber-Optic Transceiver - Drop and Repeat	Each
Fiber-Optic Transceiver - Self-Healing Ring	Each

2 **SECTION 1733**
3 **DELINEATOR MARKERS**

4 **1733-1 DESCRIPTION**

5 Furnish and install delineator markers with all necessary hardware.

6 **1733-2 MATERIAL**

7 Refer to Division 10.

Item	Section
Delineator Markers	1098-13

8 Furnish material, equipment and hardware under this section that is pre-approved on the
9 ITS and Signals QPL.

10 **1733-3 CONSTRUCTION METHODS**

11 Submit sample of proposed delineator markers for approval before installation.

12 Install delineator markers using a method that firmly and securely anchors delineator marker
13 in the ground to prohibit twisting and easy removal.

14 **1733-4 MEASUREMENT AND PAYMENT**

15 *Delineator Marker* will be measured and paid as the actual number delineator markers
16 furnished, installed and accepted.

17 Payment will be made under:

Pay Item	Pay Unit
Delineator Marker	Each

18 **SECTION 1734**
19 **REMOVE EXISTING COMMUNICATIONS CABLE**

20 **1734-1 DESCRIPTION**

21 Remove existing communications cable.

22 **1734-2 CONSTRUCTION METHODS**

23 Removal of existing aerial communications cable also includes proper disposal of
24 communications cable, messenger cable and mounting hardware, including abandoned risers.

25 Removal of existing underground communications cable includes proper disposal of
26 communications cable and junction boxes, if required. Where junction boxes have been
27 removed, backfill hole to 95% of surrounding density.

28 Do not reuse any removed communications cable, messenger cable, junction boxes, pole
29 attachment hardware or abandoned risers on the project, unless otherwise specified. In the
30 event that any of the removed communications cable, junction boxes or pole attachment
31 hardware is to be returned to the Engineer, it will be so noted in the plans.

Section 1735

1734-3 MEASUREMENT AND PAYMENT

Remove Existing Communications Cable will be measured in horizontal linear feet of existing communications cable removed and accepted. Payment will be in linear feet. Sag, vertical segments or spare segments of communications cable will not be paid as these distances will be incidental to the removal of existing communications cable.

No additional measurement will be made for multiple cables being removed from the same conduit or same pole. Where multiple adjacent conduits exist (each containing multiple cables), each conduit will be measured and paid separately. No payment will be made for cable that cannot be removed and is abandoned in place.

No measurement will be made of the removal of messenger cable, pole attachment hardware and junction boxes, as these will be incidental to removing existing communications hardware.

Payment will be made under:

Pay Item	Pay Unit
Remove Existing Communications Cable	Linear Foot

SECTION 1735 CABLE TRANSFERS

1735-1 DESCRIPTION

Remove and reinstall existing communications cable for pole relocations.

1735-2 CONSTRUCTION METHODS

During project, transfers of existing communications cable to new poles may be required. Perform transfers as directed by the Engineer. Remove existing cables from pole to be removed and reinstall these cables and any existing attachment hardware on new pole. Remove all communications hardware from existing pole. Furnish and install any new attachment hardware as required.

1735-3 MEASUREMENT AND PAYMENT

Cable Transfer will be measured and paid as the actual number of cable transfers with attachment hardware to new poles furnished, installed and accepted.

Payment will be made under:

Pay Item	Pay Unit
Cable Transfer	Each

SECTION 1736 SPREAD SPECTRUM RADIO

1736-1 DESCRIPTION

Furnish and install a spread spectrum radio system with all necessary hardware and signage in accordance with the plans and specifications to provide a data link between field devices (i.e. traffic signal controllers, dynamic message signs, etc.). Provide a radio system with a bi-directional, full duplex communications channel between 2 "line-of-sight" antennas using license free, spread spectrum technology operating in the 902-928 MHz frequency band.

Furnish material and workmanship conforming to the NEC, the NESC, UL or a third-party listing agency accredited by the North Carolina Department of Insurance and all local safety laws. Comply with all regulations and codes imposed by the owner of affected utility poles.